

Notice of Allowability

Application No.

10/823,458

Examiner

Zia R. Hashmi

Applicant(s)

MENON ET AL.

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/28/2006.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 2/28/2006.
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


JACK BERMAN
PRIMARY EXAMINER

DETAILED ACTION

1. A request for continued examination application was received on February 2, 2006, together with an Information Disclosure Statement. The cited references were expressly considered for further prosecution of this application. No grounds of rejection were revealed after considering the cited references.

Allowable Subject Matter

2. Claims 1-20 are allowed.

3. The following is an examiner's statement of reasons for allowance:

4. With respect to independent claims 1 and 11, prior art fails to disclose a method or apparatus for providing error correction in an imaging system, the system comprising: error determination means for determining an amount of error associated with a spot at (x,y) in a binary pattern to be imaged; determination means for determining the location of a nearest exposed spot at (xi,yi) for each spot at (x,y); and dose modification means for modifying an exposure dose at the nearest exposed spot at (xi,yi) for each spot (x,y); and dose modification means for modifying an exposure dose at the nearest exposed spot (xi,yi) for each spot (x,y).

5. With respect to independent claims 7 and 17, prior art fails to disclose a method or apparatus for providing error correction in a lithographic imaging system, the system comprising: exposed pattern simulation means for simulating an exposed pattern of a binary pattern to be imaged; thresholding means for determining a thresholding pattern by applying a thresholding function to the exposed pattern; error determination means for determining an amount of error associated with a spot at (x,y) in a binary pattern to

be imaged corresponding to a difference between the thresholding pattern and the binary pattern; determination means for determining the location of a nearest exposed spot (x_i, y_i) for each spot (x, y) ; and dose modification means for modifying an exposure dose at the nearest exposed spot at (x_i, y_i) for each spot at (x, y) .

Claims 2-6, 8-10, 12-16, and 18-20 are allowed by virtue of their dependencies on the independent claims 1, 7, 11, and 17.

Conclusion

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments of Statement of Reasons for Allowance".

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zia Hashmi whose telephone number is (571) 272-2473. The examiner can normally be reached between 8.30 AM- 5 PM. If attempts to reach

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the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee
can be reached on (571) 272-2477.

Zia Hashmi

May 15, 2006.


JACK BERMAN
PRIMARY EXAMINER